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The paragraph [0005] beginning at page 2, has been changed as follows:

[0005] It is disadvantageous in this procedure that there is a relatively high calculation demand for demodulating data contents down to the bit level

The paragraph [0020] beginning at page 6, has been changed as follows:

[0020] Before embodiments of the process of this invention are described in more detail with reference to Figs. 1 and 2, an example of EDGE–burst is first explained with the use of Fig. 3 to aid in the understanding of the invention; although it should be understood that the invention is not limited to EDGE signals, rather it is only described using EDGE signals. The invention is suitable, for example, also for GSM signals.

The paragraph [0025] beginning at page 8, has been changed as follows:

[0025] In each of the demodulation branches 4a through 4c, the signal is respectively fed to a demodulator 5a to 5c that respectively demodulates the input signal with a demodulation method different from the others, that is, in relation to, or using, a different signal parameter or parameters. For example, in the first demodulator 5a of the first demodulation branch 4a, an amplitude demodulation is carried out, thus the relevant signal parameter is the amplitude, that is the value. In the second demodulator 5b of the second demodulation branch 4b, a frequency demodulation is carried out, so that this is a demodulation in which frequency is the relevant signal parameter. In the third demodulation branch 4c the demodulation is shown to be effectively generalized in that the input signal S is subjected to a function f(x=S), with sampled values of a digitized input signal S respectively forming a variable of the function f(x). In this regard, basically, any analytical, or intermittently defined function is suitable. For example, the input signal S can be made logarithmic or time differentiated. Also, various functions can be combined with one another; for example, first an amplitude demodulation can be carried out and then a logarithm of the

amplitude-demodulated signal can be created. Also, a frequency demodulation can be first carried out and then a time differential can be formed so that altogether a phase demodulation d/dt (FM) = PM results. Contrary to processes in the prior art, here no demodulation takes place at the bit level, rather, the input signal S is, to a certain extent, subjected to weighting functions f(x) in order to create input signals S_{AM}, S_{FM}, $S_{f(x)}$, that respectively are particularly characterized by different signal parameters, for example, amplitude or frequency.